Nor' West Miner

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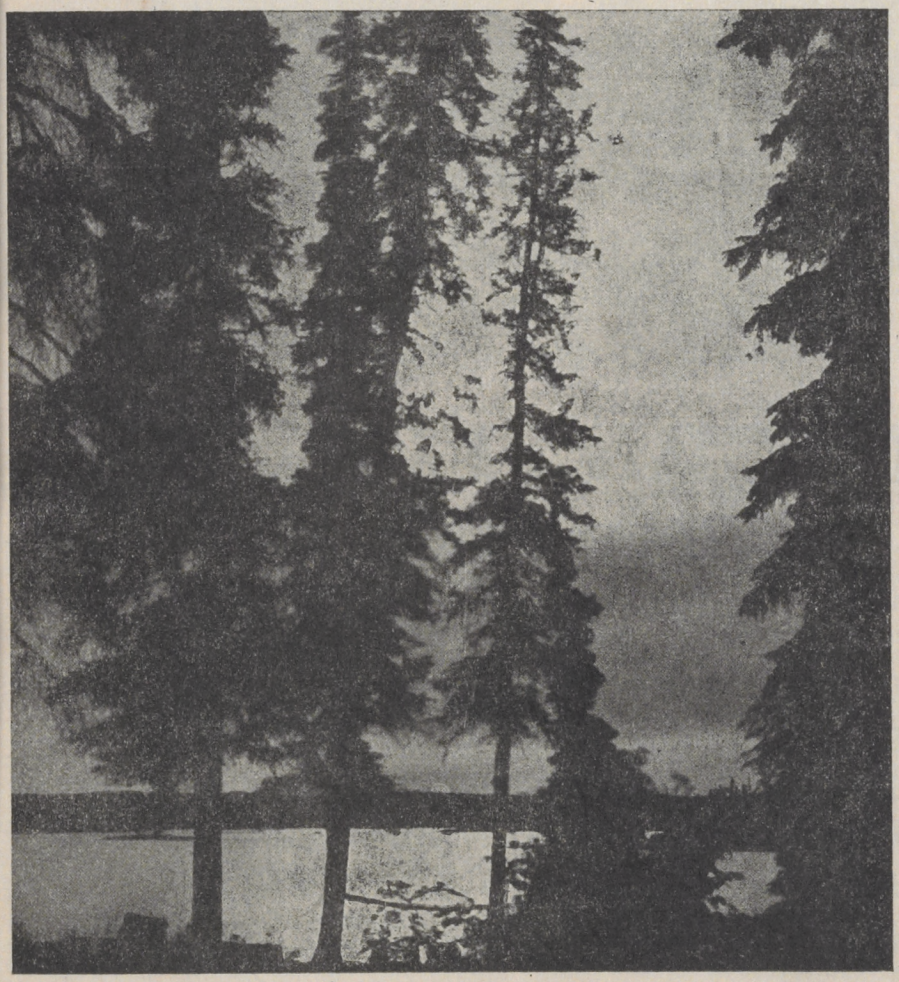

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THE NOR' WEST MINER

EDITOR—F. S. WRIGHT

Devoted to development descriptive of the North West Territories, Northern British Columbia and the Yukon—Along the Trail of the Alaska Highway.

Published at Edmonton, Alberta—"The Gateway to the Far North and Alaska."

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Says the Miner . . .

"Robbing the public," is a natural argument used by many politicians, when talking about the private development of Alberta's natural resources. They seem to forget, that for the past fifty years at least, we have stood on the sidelines content to exclaim, "Thar's gold in them thar hills" and doing little or nothing to get it out.

In recent years, particularly in the oil development, private enterprise has discovered and is discovering many major oil bearing fields in Alberta. It is spending plenty of money in bringing them into production. Remember, if it had been left to public enterprise, we should still be "Taking in each other's washing".

In these days of the various "'isms" it has become fashionable to assail this enterprise on the part of people with vision and daring enough to risk both time and capital. They are "robbing the public".

The public ,or the people of Alberta, under present government policies get fair royalties from oil producing lands—they, in addition, benefit by the greater development adding new wealth to the province. Surely, those who, by their vision and enterprise, enable these royalties and other benefits to arise, are entitled to benefit the most.

A fair royalty on production guarded by proper conservation regulation is all that the people of Alberta can fairly demand. If more is demanded, private enterprise quits and says "It will not be robbed".

Some will, of course, say, "We should develop them ourselves. Quite right, we should, but who is going to take the risk? The taxpayers of Alberta? No government can or should be expected, in the best intests of the taxpayers, to speculate in oil. That way simply leads to a situation where, after expending perhaps millions of public monies, we would still sit back in the old arm chair, spit on the stove, and exclaim, "Thar's gold in them thar hills".

The age of Babel has arrived once more, as it did in biblical days when Utopian man was determined to build a sky scraper to reach Heaven.

On paper everyone demands a United Canada, but many seem to be determined to disunite Canada. Modern science has made it easier for every sort of "ism" to spread its propaganda. All nine provincial governments combined with numerous self governing local bodies all dragging upon the taxpayer's purse, head the picture of the Tower of Babel. Add to them the thousands of various associations and various other bodies, and we have the picture of at least 80 per cent of the adult population of Canada either being Presidents or other officers of various high sounding organizations. Babes in arms, are perhaps the only ones left not yet organized in a little group.

How can we have an "United Canada" under these conditions? The independent or the individualist is a back number in present civil life—yet from the time Adam was a "pup" the man who won was the man who stood on his own feet, thought for himself and his fellowmen and refused to be led through the nose by any little combination of so called officers.

The only ones who benefit are the gentlemen known as the Communists. They glory in creating this confusion, for they know that an United Canada will have none of their "ism".

MOVING A $7,000,000 REFINERY OVER THE ALASKA HIGHWAY

There was a refinery at Whitehorse, from which Alaska and its oil requirements were served during the war. When peace was declared the refinery was closed down and awaited a customer to take it over. Imperial Oil, when Leduc was brought in, sensed the fact that this refinery could be made to answer requirements. That it could be dismantled and brought down piece by piece over the Alaska Highway to Edmonton. Imperial bought the refinery from the U.S. Government for $1,000,000.

The plan was to dismantle the plant, haul it 919 miles by truck to Dawson Creek via the Alaska Highway; load it at Dawson creek for shipment by rail to the new location at Edmonton and there to reassemble it so that it could be ready to operate by the end of 1948. By then the $1,000,000 will have jumped to $7,000,000 in final cost. The total haul weighed an estimated 7,000 tons.

W. M. Barnes and Company of Los Angeles took over the job of dismantling the refinery at Whitehorse; hauling it to Edmonton and reassembling it there. In short order they opened offices in Edmonton and Whitehorse and provided a fleet of eight big diesel trucks and trailers for the haul. Sixteen drivers had wheeled the trucks from Los Angeles, California, over the Alaska Highway to Whitehorse and other drivers were added to the hauling staff before the first snow.

By mid-winter close to 300 men were on the payroll. Half were preparing the site at Edmonton. One hundred were dismantling the refinery at Whitehorse and the remainder were employed on the trucking operations over the highway and at the rail head at Dawson Creek.

The whole operation was carefully planned, each piece of the refinery as it was dismantled was carefully marked, photographed and blueprinted so that there should be no mix up at the other end. The huge trucks drove night and day over the highway to keep the pattern developing as plotted.

The successful operation of these huge trucks over the highway was a tribute to the skill of the men who planned and routed and built the Alaska Highway through the wilds of the North; to the truckers who handled these huge trucks with special skill and to the careful planning which made the refinery migration a success.

No larger vehicles had ever travelled over the Alaska Highway. These huge road giants weighed almost 20 tons each even when empty. The largest one had 21 forward speeds. The dashboards of these trucks look like the dashboard of a modern aeroplane as regards driving gadgets. By spring the drivers of these trucks would have rolled up a mileage of close to 500,000 miles before the job was completed.

The trucks ran on a regular schedule, with two drivers on the drive. The time allowed, seldom overrun, was 50 hours from Whitehorse to Dawson Creek, with one stop for refueling at Muncho Lake, the half way point.

At first American drivers brought from sunny California were at the helm but they were soon replaced by Canadian drivers. These Canadian drivers were used to the war-time highway and to the rigors entailed in travelling over any road in severe winter, and most of these drivers have spent almost the entire winter in their cabs. Each truck had sleeping accommodation provided, installed behind the cab, so that one could "sleep" whilst the other kept the wheels arolling. With loads of from 40 to 50 tons they found it rather difficult to get a real sleep and coined the slogan, "The winter of little sleep". Early in the operation, tire punctures were the truckers' bug bear with 20 or more tires on each truck, sharp gravel or nails had their own selection. After snow came these troubles disappeared, but then new trials appeared, for often the roads became so icy that the trucks could not operate for days on end.

The major hazards cropped up because the Alaska Highway is no ordinary road. It is true it is maintained in top condition by Canadian army engineers but it still cuts through much rough conutry. Even the road bed itself whilst good was not thought capable of carrying the heavy traffic planned until Jack Frost made it solid in every way. Bridges were a main problem, for whilst the bridges in existence could carry ordinary traffic with safety, it was another matter to put such huge loads over them. One 3,000 ft. wooden bridge was especially doubtful and here, the

engineers adopted the years old Canadian lumber jacks' system of hauling heavy loads across rivers. They built an ice bridge or tried to, but it was an exceptionally mild winter and it is still not ready for the final load—a 75-ton tank.

From the description given of how the work of building this ice bridge was carried on, it is evident that the usual loggers' idea was not carried out. In building a logging bridge, alternate layers of logs and snow are built up on the ice and as each layer freezes, a further layer is laid so that eventually the bridge will carry the world if necessary. In this case the engineers tried to build it up with ice from water pumped into a trench banked with snow.

However despite these obstacles, there were few breaks in the regular 900 miles of haul. It is stated that the last loads have now arrived in Edmonton.

To give an idea of the work involved in dismantling and rebuilding of the plant, it should be noted that the construction was only made possible by the acquiring of various units from Corpus Christie, Texas; Hamilton, Ont.; Pinedale, California; and from some 2,000 suppliers throughout the United States.

This major job of haulage over the Alaska Highway shows that this splendid road is serving a real purpose in peace as it did in war, notwithstanding the many critics who claim that the Alaska Highway was a wasteful expense and can serve no useful purpose of the future. The attention of people resident on the Pacific Coast is especially drawn to this.—Data from Imperial Oil Review.

Business is something which if you haven't got any you go out of.

FIRTH RIVER GOLD

There is every indication that there is to be a stampede into the gold finds on the Firth River, which comes into the Arctic at Herschel Island.

The R.C.M. Police have already gone on record as stating that Firth River is in one of the toughest spots on the American continent from the point of view of access and continuity of operation. Anyone contemplating making the trip would be well advised to heed this advice.

It is true gold has been found and is known to exist perhaps in many places on the Firth River and its tributaries, but the prospecting season is very short as regards placer mining, in fact, sixty days would be the longest period when water would be available. Availability of water is a major factor in successful placer operation. Without a proper head of water, it is almost impossible to recover gold in any appreciable quantity.

Prospectors going in with dog teams before the breakup will have a long, long wait until the water runs in the hills and the snow goes off making real prospecting possible.

Anyone going in from Fort Nelson using rafts must be sublimely indifferent to what they are going to face before they reach even tidewater on the Arctic. It's a long way for even a steamer, for a raft it means almost a summer lost, even if it does not break up on the way down the Liard and the Mackenzie.

A gay fop from Monticello
Was really a terrible fellow
In the midst of caresses—
He filled ladies' dresses
With garter snakes, ice cubes and jello.

McMURRAY ASPHALT SANDS

Much has been written concerning McMurray Asphalt Sands and their commercial use in the form of oils and other by-products and the tremendous nature of the oil content of the sands. The history of the operations of one company towards achieving a successful issue should be of interest to the many people who have invested in various tar sand promotions and also to the Government of Alberta, the latest to take an interest in the above.

The details related here go back as far as 1925, when R. C. Fitzsimmons became interested in the field and selected ground on the same site upon which the Alberta Government is now operating.

The first operation by Fitzsimmons was to take a crew of men into the field and do some test drilling and other exploration work. During that work a small model was made to be used as a method for extracting the bitumen from the sands. From this crude plant a few barrels of bitumen were successfully extracted.

In the spring of 1927, a larger crew and better drilling equipment was moved in by Fitzsimmons and operations were carried on to define the extent, depth and richness of the deposits as well as the amount of overburden.

In the spring of 1930 a small extraction plant, modelled after the one used in 1925 was made up and some 250 barrels of pure bitumen was extracted from the sands after cleaning and dehydration. This material had only a trace of dirt and less than 1 per cent moisture. Success in solving this problem was by trial and error, right on the ground.

Later that year a better plant, mechanically, was worked out and in the spring of 1931, the process followed was patented by the International Bitumen Limited, the company Fitzsimmons had formed to carry on. The new plant was installed in 1931 driven by power and this easily ran out a production of 60 barrels a day. 1,000 barrels were produced. After this production it was found that there was no market for the bitumen produced, so the company was forced to give this amount and further amounts produced in 1932 and 1933, away in order to try and popularize its use industrially.

Of the above production some was used for paving in the National Parks, one mile of road 60 miles west of Banff being paved with it. Several blocks of streets in Medicine Hat, and Banff were also paved with it. In addition a large quantity was used for roofing purposes in Calgary and other places. In this stage it was excellent for certain kinds of paints (waterproof) and roof coatings, laying new building roofs and paving, but it could not be marketed commercially until a refinery was built to turn it out in specification materials.

At this time the company's finances were almost exhausted. Due, mostly to the number of tar sand promotions which had gone sour on the financial markets, it was impossible to raise further finances necessary to carry on to commercial production and it was not until 1937 that the company was able to obtain suffient funds to erect a refinery.

The addition of the refinery to the plant enabled the company to enlarge the extraction plant to a 200 barrel daily capacity. In 1938 the new plant in 60 days of operation produced some 50,000 gallons of crude oil and 3,500 barrels of asphalt.

At this point the company's funds were once again exhausted and although the plant had proved, without a shadow of doubt its success in the extraction process, further improvements were still necessary.

Efforts were made to interest the Provincial Government of Alberta to put up $50,000 of which $35,000 was for the purchase of certain mechanical improvements and $15,000 for operating expense. However this approach met with no success.

In late 1942, the company had some success in interesting outside capital and so a new company was formed known as Oil Sands Limited, with control of the the same passing out of the hands of the management of the old company. However it was not until 1944 that the new machinery was ordered, although the old plant was started up in 1943, temporarily to produce some bitumen to have on hand, but not as a commercial operation.

With the new improvements installed, Fitzsimmons states that it had the desired effect of perfecting process of extraction, overcoming the mechanical difficulties and making for smooth, efficient operation, the plant was then fully capable of

turning out 350 barrels per day (ten hours) on a practical commercial basis. He adds there was no reason why it shouldn't have been run continuously for the balance of that season and during the summer season every year since, with substantial profits from the operation. Also to provide the essential knowledge necessary for the erection of a large scale production plant.

In the 1938 operations of International Bitumen Company Limited, it was proven that the total cost of production (at the then prevailing prices for labor and material) was 70 cents per barrel.

350 barrels per day for six months per year meant a production of well over 50,000 barrels. By running two shifts of ten hours each this could have been doubled. Part of this production—asphalt—could have been marketed at from $8.00 to $12.00 per barrel.

The Provincial Government has since become interested and has made an agreement with Oil Sands Limited and Bitumen Limited. The agreement was made with the two companies for the reason Oil Sands Limited, a publicly owned company had turned over some 400 acres of its ground to Bitumen Limited a privately owned company, in which one man held 19,999 shares of the 20,000 shares issued.

Ignoring the old proved plant, it was decided to build a completely new plant on the lands held by Bitumen Limited for some reason which the Government no doubt can explain. This new plant was to cost around $500,000. Its actual cost to date is $725,000 and is still not in operation, although according to the manager of the new plant, it is expected to go into operation this year, purely to prove that continuity of production on a commercial basis is either possible or impossible.

According to Fitzsimmons, the process adopted by the Provincial Government and Oil Sands Ltd. and its subsidiary company Bitumont Limited, is the the one which was patented by him and became the property of the above companies, who since included these processes in the agreement made with the Provincial Government.

Officials of the Provincial Government state that it, the Government, is perfectly protected in its investment, and failing turning the perfected plant over to a private company intends to operate it as a government venture.

This goes to show, that there is no doubt, the problem of extraction was solved successfully by the International iBtuminum Ltd. It, however, has yet to be proved that these oil products can compete with well oils.

THE GEOLOGICAL SURVEY

"A century in the History of the Geological Survey of Canada" is a recent Ottawa publication, written by F. J. Alcock and published by Geology Branch of the Department of Mines and Resources.

It gives a complete history of the progress made in geological survey in Canada commencing with the voting of the "huge sum" of one thousand five hundred pounds in 1841 for a geological survey of the Province of Canada. Sir William Logan, called the Father of Canadian Geology (1798-1873), was perhaps the founder of the present geological survey system. He was followed by A. R. C. Selwyn—1860 to 1895—George Dawson 1895-1901. Robert Bell 1901-1906. A. P. Low 1906-1907. R. W. Brock 1908-1914. Wm. McInnes 1914-1920. W. H. Collins 1920-1936. Charles Camsell 1920-1946. G. A. Young, Chief Geologist 1924-1943. Today the Chief Geologist is Dr. G. S. Hume, well known in the North.

The Geological Survey has become one of the most important departments of the mining industry of Canada. Its work has led to many of the major discoveries in Canada, in particular that of the radium mines at Great Bear Lake. Its map and photo survey service gives mining information of untold value to prospectors and others.

Copies of this publication can be obtained by writing the Bureau of Mines, Ottawa.

RADIUM ORES

Prospectors seeking to take advantage of the recent lifting of regulations concerning private holding of radium bearing claims can obtain a copy ofthe Prospectors Guide for Uranium and Thorium Minerals in Canada, published by the Bureau of Mines, Ottawa. It gives much information of value.

There's one thing I want to tell you before you go any further."

He: "What's that?"

She: "Don't go any further."

NATURAL GAS AS SYNTHETIC FUEL

Alberta is one province in Canada with proven gas reserves capable of meeting its industrial and domestic needs for a century or more to come. While it uses 35 to 40 billion cubic feet a year, its seekers for oil have been uncovering new gas reserves at the rate of 500 to 1,000 billion cubic feet yearly during the past few years. Today, its remaining proven reserves are probably at least 3,000 to 4,000 billion cubic feet and there is good reason to believe that undiscovered reserves are immense.

The future for Alberta's (and Western Saskatchewan's), natural gas resources is very bright. They are being used at present for domestic and industrial fuel and power purposes within the province. While corporations in Manitoba, Saskatchewan, British Columbia and the United States have made enquiries regarding developing and piping natural gas to various places outside Alberta, the Provincial Government has stated it is not prepared to permit its export, until it is satisfied that there are reserves surplus to the province's own requirements, which it is hoped will be expanded greatly in the next few years. A commission is examining the natural gas resources and potential markets and is expected to issue a report in the spring or early summer.

Synthetic Fuels

The day of synthetic fuels has dawned and prominent amongst the primary ingredients of these new fuels is natural gas. Standolind Oil of Indiana is erecting a huge plant costing at least $50 million dollars, tributary to the great Hugotin gas field in Southwest Kansas. The purpose is to convert natural gas into synthetic gasolene and oil. Planned capacity is 7,000 to 8,000 barrels daily of synthetic fuels plus 100 million pounds of by-product chemicals each year. A $19 million dollar plant of similar type is to be erected in the near future at Brownsville, Texas, to utilize the natural gas of the Texas fields. It is expected that this plan will consume 90 million cubic feet of gas and 50 million cubic feet of oxygen per day.

At prevailing prices it is felt that synthetic fuels can compete successfully with the natural products. Of course they will be helped by the production of such important chemical by-products as a whole line of alcohols, including methyl, ethyl, prophyl, butyl, and amyl; acetic acid, proponic acid, acetone, acetadehyde, to mention but a few.

Big Natural Gas Fields

Alberta and the West have many small or scarcely tapped gasfields supplying local communities, the potentialities for which are more guessed than known. It has many indicated gas fields tapped while drilling "wildcat" oilwells which are neglected or temporarily abandoned for lack of a local market. It also has several great established gas reserves deliberately opened up by oil companies with an eye to the future. Alberta's largest single gas reserve is Viking-Kinsella, covering more than a quarter of a million acres in Central Alberta some 70 miles east and south of Edmonton. The field was first opened up by Northwestern Utilities Limited, some years ago to provide gas for the City of Edmonton. In 1945-46, Imperial Oil set out to establish the limits of the field. Its purpose, if possible, to establish sufficient gas reserves to warrant installation of a synthetic gasolene plant. The program was highly successful as the proven area grew from some 50,000 to about 250,000 acres and reserves rose to the present estimate of from 1,500 billion to 2,000 billion cubic feet of gas. Because of the Leduc oil strike, Imperial has deferred its gas synthesis plans, but the gas is there awaiting the need.

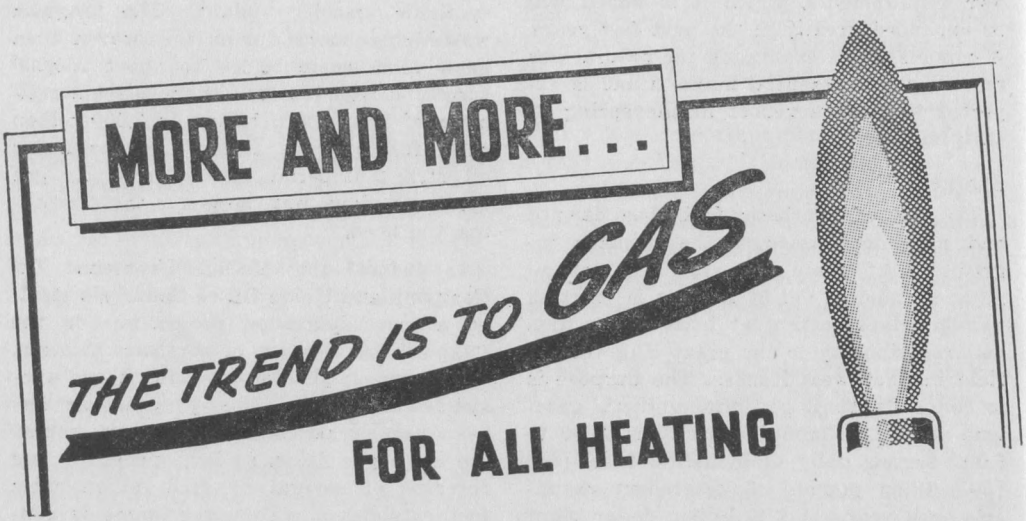
In 1946-47 the McColl Frontenac Oil Company and Union Oil of California started a gas exploration programme in the Pakowki Lake region of southeast Alberta. The purpose; also reserves for a gas syn-synthetic plant. The programme has been notably successful with three separate large gas fields, so far, opened up and reserves of several hundred billion cubic feet established. The programme is continuing.

Shell Oil Company of Canada has its great gas reserve at Jumping Pound, 20 miles east of Calgary in the Foothills, in a deep structure of the Turner Valley type. Shell started out after oil but made a discovery of oil-laden gas in 1944. Unlike the Turner Valley however, Jumping Pound failed to yield a rich oil pool on the flanks of the structure. Instead, it rates as a gas reserve believed good for 500 billion cubic feet or even more.

Northwestern Utilities Limited

Serving more than twenty-three thousand customers in Edmonton and eleven other Cities and Towns in Central and Northern Alberta from the . . .

Viking-Kinsella Gas Field



NATURAL GAS

For HOMES and INDUSTRIES

At Princess, California Standard and the several independents with acreage in the area, have a gas reserve estimated to exceed 500 billion cubic feet. Continued exploration for oil may increase this substantially.

The City of Medicine Hat, only Canadian city to own and operate its own gas field has a reserve estimated at several hundred billion cubic feet. This field was discovered more than fifty years ago and has been developed gradually to meet the growing domestic and business requirements of the city. To the south of the field, California Standard made a gas discovery at Dunmore in 1947, and is now proceeding with further exploration for both oil and gas possibilities of the region.

At Pincher Creek, at the end of 1947, the Canadian Gulf Company at a point some miles south of Pincher Creek in the Foothills encountered a tremendous flow of wet gas at its Gulf-Pincher Creek No. 1 well. The initial flow was estimated as being 10 million cubic feet daily. Following closing of the valve pressure built up to 5,775 pounds per square inch, the highest formation pressure yet recorded in Alberta. Depth of the well at the time of the test was approximately 11,755 feet. It is now shut in awaiting installation of adequate controls to deal with the tremendous pressure before testing begins.

* * *

That is the picture as to Natural gas potentialities and their use as it is in Alberta today. It only takes in what is known as southern and Central Alberta. for to the North of Edmonton there are huge untapped areas of potential gas and oil lands—especially down the great Peace River and the Athabasca River. For hundreds of miles, as these two rivers run north, gas seepages and even oil seepages are in existence.

Below Peace River Crossing, a town 300 miles north of Edmonton on the Peace River, several "wildcats" were drilled some years ago and all produced gas in quantity. Some of these wells are still burning and for hundreds of yards around them the timber is bleached white from fumes.

On the Athabasca River between Athabasca Landing and McMurray there is the known Pelican Rapids gas field, where gas pressures in a well drilled in 1915 were so heavy as to blow the derrick to pieces, and as government reports state, "Blew stones and rocks out of the hole like rifle bullets". All along the banks of the river are gas holes (natural) where many a camper has cooked his dinner just by putting a match to the hole.

Is there more? Well Alberta extends North some 600 miles from Edmonton. Areas are very similar to the present known formation south west of Lake Athabasca. Then if you want to forecast oil possibilities still further—vision the huge basin of the Mackenzie River right down to the Arctic. Is there oil and gas there? At Canol wells are already developed and in use for northern requirements.

The possibilities must stagger the imagination and with the present advent of huge capital investments into the Alberta of today, who will dare to forecast what the next fifty years will bring in development and prosperity to Alberta and the North.

If there ever was a time when Alberta needs men of vision as leaders—it is today, when this huge industry of the future is being born.

*Gas data from Western Canada Oils, published by Jas. Richardson and Sons.

SNARE RIVER POWER

Dominion Government estimates include $2,275,000 further expenditure on the Snare River Power project upon which $1,500,000 was voted last year. It is expected that the plant will be completed and in operation delivering power to Yellowknife mines in October next.

He had heard a lot about "Nudist Camps" and wanted to see one. His host, a bit of a wag, tired of listening to his importunities gave in at last. He said, "The Sunburst Nudists are holding a meeting at my place, you can come along."

On the day appointed—he went along—was met by his host, at the door of his house. The host was in nudist form.

"Come in," he said, "the meeting is out on the lawn," adding, "Of course, you are in Rome now and must do as the Romans do."

He took off his clothes, walked behind his host to a sliding door. As his host pulled back the door, carefully stepping behind it as he did so—our nudist friend walked out. Yes, there was a meeting on the lawn numbering about twenty-five people, but they were all dressed. He was the one lone nudist.

A HALF CENTURY OF CANADIAN MINING

Production from all mines in Canada from 1898 to 1947 aggregated over nine and one half billions of dollars, according to W. H. Losee, Director of the Census of Industry and Merchandising of the Dominion Bureau of Statistics, in a review of the highlights of the mining industry.

In 1898, production totalled only $38 millions, $10 millions of which were made up of gold produced in the Klondyke; $8 millions in coal; $3 millions in gold from British Columbia, and the remainder consisted of silver, lead, copper, nickel, oil, and several minor metals, non-metals and structural materials. Production in 1947—fifty years later—was recorded at $619 millions, the highest on record ,of which the metals group accounted for $389 million; fuels $105 million; non-metallic minerals other than fuels $52 milion, and structural materials $73 million.

During this period, Canada had attained second place among the countries of the world in gold production, second also in zinc, and fourth in copper and lead. She had long been a leader in the production of nickel and asbestos, and the platinum recovered in the treatment of nickel-copper ores placed her among the leading countries of the world producing this valuable metal. She also led in the production of cobalt during the years in which the cobalt-silver camp of Ontario was so active.

Prior to the first great war, all base metals, except lead, were exported in ores or in the semi-refined state. The refined metals had then to be imported by Canadian manufacturers. In 1916, however, the Consolidated Mining and Smelting Co. Ltd. began the refining of zinc and copper at Trail, British Columbia. Nickel was refined at Port Colborne in 1918. In 1930 refined copper was made at Copper Cliff, and in 1931 at Montreal East. As a result, Canada was independent of foreign sources for these metals when the last war broke out, and was also of tremendous assistance to her allies in this regard.

Canada is second in the production of aluminum metal, though bauxite ore is not produced in Canada. This results from the construction of a large plant built and put in operation at Arvida, Quebec, in 1926, and enlarged since.

During the past fifty years, the famous Sullivan Mine in British Columbia has become one of the greatest single sources of lead and zinc; the Noranda mine in Quebec had been discovered and developed into one of the leading Canadian copper mines; the Flin Flon in Manitoba, found in 1915 and brought to the production stage in 1930, focused attention on the possibilities of mining development in Manitoba and Saskatchewan, and the Lynn Lake nickel deposits in Manitoba are being actively exploited by the Sherritt-Gordon Mines Ltd.

The length of time it takes to bring a mine to the production stage is stressed, using the Sullivan and Flin Flon as examples. It was during this period also that lode gold mining had become such an important industry in the country.

The Porcupine camp was discovered in 1908 ,and the city of Timmins has grown to a population of 27,700 people. The Kirkland Lake camp was discovered in 1911 and the population of the town of Kirkland Lake is in the neighborhood of 18,000. The discovery of the Horne mine in 1921 started a rush into western Quebec, and led to the discovery of many important gold producers in the townships east of Rouyn. These were followed by discoveries in Red Lake and Little Long Lac in Ontario; in Manitoba, Saskatchewan, and the Northwest Territories. The great placer deposits of the Yukon were at their peak shortly after the turn of the century. The Premier mine in British Columbia has been the leading gold producer in that province for many years. The Bralorne and Pioneer in the Bridge River area, and the Cariboo Gold Quartz in the Cariboo district, are among the oustanding gold mining properties brought into production during these years.

The development of the Steep Rock iron ore deposit, discovered in 1938, was a tremendous engineering undertaking, and resulted in an iron ore mining operation of major proportions, over a million, two hundred thousand tons being shipped in 1947. Great hopes are held for the development of the iron ore resources of northern Quebec, along the Labrador border; this project has strong financial backing by the management of one of Canada's largest gold mines and geological and enginering personnel of the highest order.

The Turner Valley of Alberta had been an important producer of crude oil and

natural gas since 1924, and the discovery of an oil field at Leduc, about 18 miles south of Edmonton, in February 1947, opened up a new source of oil at a most opportune time.

The most spectacular and far-reaching event of the period was the discovery of pitchblende by Gilbert Labine at Great Bear Lake in the Northwest Territories in the spring of 1930.

It is questionable if any other country can boast of such important mining advancements as those which have occurred in Canada during the past five decades.

AKAITCHO TO SINK

Akaitcho is planning to sink a three compartment shaft. Other equipment including compressors, hoist, transformers and other material is being shipped in. Present ore body is disclosed as containing around 260,000 tons of ore with average grade of $22.75 a ton uncut.

"Is there any chance for a young fellow to start from the bottom and work up?" asked the ambitious young fledgling.

"Not much," was the reply, "You see we are drilling contractors."

The Saskatchewan Potash Beds

A mineral discovery that is potentially of great importance, not only to the Province of Saskatchewan but to the Dominion as a whole, has been described in considerable detail by L. Heber Cole, mining engineer on the staff of the Federal Department of Mines in Ottawa. Mr. Cole has followed from the beginning the discovery of potash in various wells drilled for oil, gas and salt, and has presented publicly, for the first time, a summary of this information in the form of a paper at the current annual meeting of the Canadian Institute of Mining and Metallurgy in Vancouver.

"The ever increasing number of such wells points to the presence of a vast salt basin, the boundaries of which are at present unknown," states Mr. Cole. "This basin runs in a north westerly direction from a point near the United States boundary south of Regina to Waterways, and north."

Potash has been found in a number of these wells, in beds on the top of the salt beds. "The highest concentration of potash in any of the wells was found in Verbata No. 2 well a few miles to the northwest of Unity, Saskatchewan. In this well there is bed eleven feet thick which ran 21.64 per cent potash, at a depth of about 3,466 feet below the surface."

The prime importance to the national economy of an abundant and cheap supply of potash was discussed by Mr. Cole. It is particularly essential to agriculture and to certain great chemical industries. Insufficient holes have been drilled as yet to prove the exact extent and the average quality of the potash beds, and the next step is to drill these holes. If the results for the additional holes confirm those already obtained ,there will be full warrant for the heavy investment entailed in developing commercially Canada's first important potash deposits.

DISCOVERY MILL

Discovery has now acquired a 150-ton mill, which is being brought in during the summer months. The 250-ft. level has a length of 290 feet averaging 5.2 in width and going 0.81 oz. to ton.

Teacher: "Where is the capital of the United States?"

Pupil: "On loan all over Europe."

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A TRIP TO SEE THE KING

By F. S. WRIGHT

As I stepped into the Gold Run Detachment of the R.C.M.P. after a patrol trip down the creek watching the miners clean-up the winter's gold and seeing that the Government got the royalty it was entitled to—Corporal Cobb, the man in charge of the detachment, said, "Wright, the Sergeant Major wants you to ring him up." Yes, we had phone connection with Dawson even as far back as 1902, but neither dogs or horses for transport. Those were the days before the motor car became the habit it is today. As for aeroplanes—there were no such animals.

I took down the phone and rang Dawson. The Sergeant Major said: "Do you want to go to King Edward's Coronation?" He was being crowned in London, England that year. "Quit your kidding" was my reply, this is the 23rd of April—not the first of April." "But," he replied, "we have orders from Ottawa to send you, so you had better come in to Dawson and get going." He added: "The last stage out to Whitehorse left this evening."

I was exactly 50 miles from Dawson at the time of that call. Had supper, and hit the trail for Dawson, travelling on foot. It was almost daylight at the time, as the long days were nearly at hand. I got to Dawson early the next morning and reported to the Sergeant Major. He kind of smiled when he saw me. Repeated what he had said over the phone adding, "How are you going to get to Whitehorse?"

Whitehorse was 400 miles up river, with the only connection being the winter stages. The last stage had already left. My answer was the only obvious one, "Guess I'll have to walk." "O.K.," replied the S.-M., "you can get going as soon as you like—take a dog team if you want to."

I hitched up a team and within a half hour was on the way up river. It was late in the morning—nearly 10 a.m. and the sun was getting pretty strong those sunny April days. There was water overflow on top of the ice which whilst at night froze solid, became mush during the day. It was not long before I recognized the fact that dogs could not swim to Whitehorse, even if a man could walk there, so unhitched them—slung the sleigh up on the bank, and turned the dogs loose. They headed for home, which was Dawson, where they knew they got a fish or so a day, and I headed for Whitehorse.

I had already done my little 50 miles the night before, so the miles and the water gave me plenty of wishful thinking as to why I had ever started—but the prize ahead was too great to ignore. A trip to London, England, at the Government expense, favors thrown in—so I kept going. That was Wednesday the 24th, and on Friday in the early morning, around 2 a.m., I pulled the latchstring on "Daddy Dempster's" police post at Half Way and was just 100 miles on my way to Whitehorse and the rails.

"Where are you going?" asked Dempster. He was the man who ran the McPherson-Dawson patrol for some years and knew what "mushing" was like. "Whitehorse-Vancouver, Regina, Quebec, Liverpool and London," I answered. He looked at his partner and I could visualize him as thinking, "Here's another nut for the asylum at Dawson." However, after hearing my story he evidently decided I was not an hallucination either for himself or myself and said, "Let's eat." They practiced true Yukon economy at that post—they did not seem to like cooking and so made a day of it once a week or so, when they brewed a big stew, and set it outside to freeze. Everytime they wanted to feed, one went outside with an axe and chopped off a great chunk of stew. Thereupon I slept—and I don't mean maybe, for I had been on my feet since Tuesday with just short stops at intervening detachments.

It was no good travelling on during the day—the shell ice turned into water under the sun's heat, but around 4 p.m. it began to tighten up as the sun got lower, so once again around that time I hit the trail up river for Whitehorse.

I forgot to mention the last stage was still ahead of me, and, according to the boys, I should be able to catch it before it got too far on the way, as it was making "hard going" over the overflow ice. However, I was not too optimistic for those stages had six Oregon horses apiece—they were good horses and usually the stage made the trip at the rate of 96 miles a day—four days to Whitehorse from Dawson.

It was tough going at first but as the

shell ice tightened up the going was real glare ice, smooth and slick, but ideal for mocassin travel. I got to Selkirk. Here there were several outfits on the way down river to Dawson, held up by the gradually breaking up of the ice. They were good fellows, but very pessimistic and gave me tales aplenty as to the "horrors" of the trail ahead. I was young enough in those days to be curious, so determined to go on around the next point and see what it was like. I went and arrived at Tantalus.

Tantalus is at the foot of the Five Finger rapids and here the winter trail makes a 75 mile detour overland. It had roadhouses every 24 miles, where horses were relayed, each relay making 24 miles on the stage route. The last stage out, which was still ahead of me, had changed from sleighs to pack horses, for there was no snow over the cut off. It was also closing up the roadhouses for the winter as it went through.

So that was that—I had to either make those 75 miles and catch the stage or the "eats" were going to be pretty slim.

I compromised with the terrible going by shoving my feet into a new pair of moccassins. Had worn out the old ones, and hit the trail. Every mile brought me nearer to the pack horse stage. It was no use stopping on the trail either for sleep or eats until I caught it—so kept going. Around daylight the next morning the little post of Montague hove in sight, and passing the stables I heard horses chewing their hay and oats and knew I had caught the stage. It was just 100 miles from Whitehorse. My walking days were over. They gave me a horse—barebacked—all the crew and passengers were on the hurricane decks of the cayuses and on we went. This dropped the pace down to a mere 25 miles a day, but everyone was happy to have left the river even at the expense of sore rears and we arrived at the Takeena River. Here we found the ice was out, and the only way to get to Whitehorse was by canoe. There was only one canoe. The stage carried the last mail out—the King's Mail had to go irrespective of all, so Sergeant Marshall and myself were elected to load up the mail and take the canoe up stream the last 12 miles into Whitehorse. Marshall was also going to the King's Crowning, he was the other fellow from Dawson, but he had caught the stage. We had quite a trip up stream. The ice was out but there were huge cakes along the banks—we had to track up stream. Sometimes one or the other took a slide off a chunk of ice and landed in the river, but at last Whitehorse came into view and "Oh boy, it looked good." It was the 3rd of May, 1902—just ten days since I had left Gold Run Creek 450 miles north on foot.

We left Whitehorse by train—then took boat from Skagway to Vancouver, and then on to Regina, headquarters and assembly point for the R.C.M.P. Coronation contingent. This consisted of twenty-five men drawn from every R.C.M.P. post in the west. Their names: D. J. McCarthy, J. Dubuque, Z. McIlmoyle, W. S. Loggin, E. H. Waller, W. G. Harvie, C. R. Peters, A. M. Richardson, V.C., W. J. Redmond, C. Junget, W A. McLelland, J. M. Gladwin, W. Haynes, G. S. Cotter, A. C. Head, D. L. McLean, E. Farquhar, R. D. McLaren, A. S. Knight, Sergeant Major in charge of troop, A. F. M. Brook, A. S. Alexander and F. S. Wright. Although most of them were either sergeants or corporals—they had all temporarily reverted to constable rank. I was a constable and it was quite refreshing to be able to talk the sergeants down on equal terms.

They gave us plenty of mounted drill at Regina—we were there three weeks and every day, we got the works getting sure seats on the cayuses for the coming parade.

We left there for Quebec and at Point Levy joined the rest of the Coronation gang which was going over. There were Queen's Own complete with bugle band from Toronto, and a contingent of Strathcona Horse. We later met a contingent of the C.M.R.'s at Whitehall as they marched on to the parade ground just back from S. Africa and the Boer War.

The old Allan Liner the "Parisian" was a full boat on the trip over. We had the Governor General and his staff on board, numerous other politicals also going over to "See the new King." They stowed us down in the forecastle. Debarking at Liverpool we went on to London and then to Alexandera Palace, where contingents from every part of the world were in camp.

We had route marches and parades galore. Every day "Coronation Day" came nearer. We were out riding one day towards the end and were temporarily halted near a railway arch, whilst they ambulanced a fellow who had fallen off his

horse and broken a leg. As we stood there, fringed by the usual admiring crowd of Britishers we heard a cockney voice exclaim from the crowd, "Sy fellows, there ain't going to be any Coronation—the King's got to have his appendix cut."

And so that was the end of the trip to "See the King." He was the first man in the Empire to establish the fact that it was necessary to eliminate the appendix sometimes from the human frame, and history does not say how many apendices have been removed since that August day in 1902. Their names are legion and doctors the world over have profited hugely.

We were sent back to Liverpool, bundled on another Allan liner and returned to Dawson City, both sadder and perhaps wiser men, but we did not have to walk the last 400 miles. The river boats were running. Yes, we left in April, got back in October—just to "See a King crowned who was not crowned at that time."

Later another contingent went over, to the postponed coronation but we were not on it. Dawson up in the Arctic Circle was a little too far for Ottawa to bring men twice to the "Crowning of a King."

Wants Alberta's Coal Industrialized

Dr. F. W. Gray, formerly Assistant Manager of the Dominion Steel and Coal Company recently addressed the annual meeting of the Canadian Institute of Mining and Metallurgy at Vancouver. He said in part,

"Per square mile of territory (leaving out N.W.T. and Yukon), Canada has 22,000 tons of recoverable coal reserves, but east of Saskatchewan we have less than 1,000 tons per square mile. On the same basis, the British Isles have 1½ million tons and the United States one million tons per square mile. The uneven distribution of Canada's coal resources, and their inadequacy to support our industrial economy aided by importations is apparent. Coal supply has been and will remain, the heaviest shackle on our industrial self-sufficiency and our national freedom in fiscal matters."

Following this Dr. Gray proposed a long term plan to alleviate it. Since we cannot bring an abundance of Alberta coal to the industrial areas of Ontario and Quebec, will it not be wise as well as profitable, to encourage future industrial expansion in the west where abundance of coal, gas and oil as well as other natural resources exist?

It is pleasing to note that even Eastern Canadian industry is at last recognizing the fact that it is better to locate a factory or manufacturing plant in a coal bearing area, where cheap fuel, gas and oil in addition, is available than to have to import American and British coal as is done in the east. All the larger manufacturing centres in the United States are centred around huge coal bearing areas. In Canada it is just the reverse.

Whilst on the subject, it might be as well to point out that in British Columbia, adjacent to the Canadian National Railway, on the Copper River near Kitselas some 7,000,000 tons of hematite iron exists. In addition splendid coking coal at Telkwa; Flux on the Skeena River alongside the railway; and magnetite iron on Porcher and Banks Islands near Prince Rupert, with a smelter site already set aside on deep water at Port Edward, near Prince Rupert. A ready made set up for the establishment of a western iron and steel industry within a 100 miles of the seaboard already served by rails. Compared with this splendid layout for a western steel industry, millions of dollars are being expended today in developing iron ore deposits in Labrador hundreds of miles from the industrial centres of the East and from tidewater.

PORT CHURCHILL SHORTEST ROUTE TO EUROPE

During the war years, the Port of Churchill was recognized as being a convenient avenue for the passing through of Western grown wheat and other grains to the European market. Many millions of bushels of grain was successfully routed through the port, which has an open navigation season almost as long in duration as the more southern route through Montreal and down the St. Lawrence River. The route is so much shorter than the southern route as to make it seem possible that in years to come the major part of freight going not only out of the west but also coming to the west from European shippers will be routed through Port Churchill.

The major British shipping firm using this route is R. S. Dagleish Limited of Newcastle on Tyne, who have a line of freighters plying the route from Newcastle to Churchill. The boats they operate are always assured of a full cargo going to Europe, and the firm is now endeavoring to get cargo bookings to Canada, principally from Manitoba, Saskatchewan and Alberta. It is stated that Mr. Peter Dagleish is shortly making a tour of the west in an effort to interest western businessmen in getting their freight requirements from Europe routed through Churchill.

The west has everything to gain and nothing to lose by doing its utmost to get this route firmly established both for outgoing and ingoing cargo. Quite a number of western business houses import considerable goods from Europe each year and would save not only time over this shorter route but also get a reduction in freight costs.

The west not only has grain to ship but also could no doubt furnish cargoes of timber, minerals and livestock once the route becomes well enough known.

Two kiddies in bed comparing notes:
"I'm a girl," said one, "what are you?"
"I'm a boy," said the other.
"But you look like a girl?"
"I'll prove it," said the boy and shyly he lifted the sheet and said, "See, blue booties!"

Repairing Castings Without Heat . . .

The repair of cracked castings without the application of heat is a process of considerable industrial value. This process, known as the Harman process is now being made available through Kirk's Metallizing Works, who are licensees for Alberta.

Nickel-alloy steel of the "invar" group, containing 36 per cent nickel is the basis of the Harman repair method. The alloy has a very low co-efficient of expansion, is ductile and can be readily machined. It has a tensile strength of about 86,000 psi in the annealed state and can be hammer drawn cold to a strength of greater than 200,000 psi without crystallization.

Metal locks are used. Various sizes suitable to the particular job are available. These are pressed into pre-drilled holes in the casting, then expanded by peening. The special shape of the lock-concave, convex with sharp edge horizontal to the plane of the lock—makes it expand readily and embed into the casting. When the group of locks have been inserted across the crack from end to end and beyond, the crack is sealed by inserting overlapping studs of the same material as the locks.

The process does not always replace welding—but does go on from where welding often fails. Harman cannot at all times be expected to succeed where welding has first been resorted to and proven unsuccessful, leaving behind mixed hard fusions which defy drilling and tapping.

The Harman process, it is stated, has already been used by many western firms, amongst them the British Columbia power commission, repairing heads of a 600 H.P. diesel engine and also by the Saskatchewan Power Commission on a 1,250 H.P. engine, both cracked through valve seats. A 40" diameter steam clyinder head, cracked 20" on the flange, has just been "Harman" repaired on the C.P.R. Steamship "Princess Victoria," with Lloyds' underwriters approval.

NEGUS GETS NEW ORE

Negus, drilling in the Campbell zone on 13th level is uncovering good ore with values from 0.81 oz. to 1.07 oz. Main No. 15 vein returned in recent sampling ore valued at $58.50 a ton over 2 feet. A crosscut is being driven on the 11th level to reach the Campbell zone in this area.

MEMBER FOR THE NORTH

The result of the combining of the Yukon and the Mackenzie in one for representation in the House of Commons has already started the political "scrap" which was bound to occur. The Yukon has already entered a candidate into the political field. This action will no doubt be duplicated by one or more candidates being entered from the Mackenzie with the result that both the Yukon and the Mackenzie will be dissatisfied as to who shall represent them at Ottawa. The two fields are totally distinct in their problems and also, which is most important, in their civil administration.

Lady Godiva was the greatest gambler in the world. She put her all on a horse.

Yep—and though she didn't win—she showed . . .

Jubilee Meeting of Mining Men in Vancouver

The Jubilee of the Canadian Institute of Mining and Metallurgy was celebrated in April of this year in Vancouver. Members from all part of Canada and delegates and guests from abroad attended technical sessions and social events in the Hotels Vancouver and Georgia, and then left on excursions round the Gulf of Georgia and to British Columbia's principal mining camps.

Said the President—

"Since incorporation of the Institute in 1898, the Dominions mineral industry has developed from a small and struggling affair into one of the worlds important units. Then we were purveyors of raw ores to our neighbors on a small scale, with a per capita annual production of $7.32. Today not only do our minerals support a great and growing industry within our own borders, but we have become one of the world's leading suppliers of refined metals and minerals. The per capita value in 1947 was over $50. Nor are we prodigal of our resources, for it is only out of our superabundance that we are helping to supply our neighbors."

The proceedings of the Jubilee meeting were designed to mark fifty years of progress in each of the major divisions of the mineral industry, namely, coal, geology, industrial minerals, metallurgy, and metal mining. Leaders in each of these lines presented papers and led discussions. Prominent Canadians and speakers from the United States addressed meetings on more general topics.

TWO PARTY GOVERNMENT

In these days of many political parties it is interesting to note that nowhere in the world has stable government been achieved under democracy excepting only on the two party system.

The Third French Republic is a real illustration of how much governmental chaos can be achieved by having too many political parties. During its 70 years of existence it changed its government at least 100 times due mainly to the absence of a two party system of government. It had some 20 active political parties.

Today Canada has at least five political parties and based on population has perhaps more than the French Republic had in the days when too many parties led it to governmental confusion.

"THE WORKERS' REPUBLIC OF CANADA???"

At a meeting in Toronto it was decided to "form "an organization" to be known as the "Workers' Party of Canada." This party to be composed of "militant class-conscious workers' to lead the workers in the struggle towards the establishment of the "Workers Republic of Canada." A provisional committee was formed, one of the members of which was Thomas Buck.

The aims and objects of the party were described as under:

"The role of the workers' party in political campaigns shall be to expose the sham democracy with which we are afflicted. The party shall take part in all campaigns with this end in view, so that ultimately the real issue will be made clear and we, the working class, shall eventually triumph at the expense of the enemies of the working class". "To help educate trade unions to appreciate the possibilities of the organizations as definite factors in carrying on the class battles caused by capitalist oppression, to initiate a movement to expose the tyranny and treachery of the reactionary labor bureaucrats and definitely to create real fighting working class units".

Almost sounds like Czechoslovakia of today, does it not? But this occurred in Toronto, Canada, December the 12th, 1921. It was quoted in the Edmonton Journal during the perennial coal strike of that year, namely December, 1922. Strange is it not that all these coal strikes occur at a period of the year when both the operators and the miners must know that the public are the chief sufferers. Fortunately the coal strike of 1947-48, had the strip mines to contend with. So the consumers didn't get the beating they received in other days.

To the man or men who care to give thought to the whole question of present day many "political parties" it must be concluded that the hopes of the "The Workers Republic of Canada" are still in existence although in more politic forms.

What and who is a worker? Today it sems as if a "worker" must be a man of muscle and not of brains, although many a man of muscle depends for his very existence on the men with brains. However, according to "The Worker's Republic of Canada" our future is to be guided by "Muscle-men". Well, Europe today is full of such and what a picture for any honest Canadian to contemplate. Can it happen here. Sure it can, if we don't watch out!

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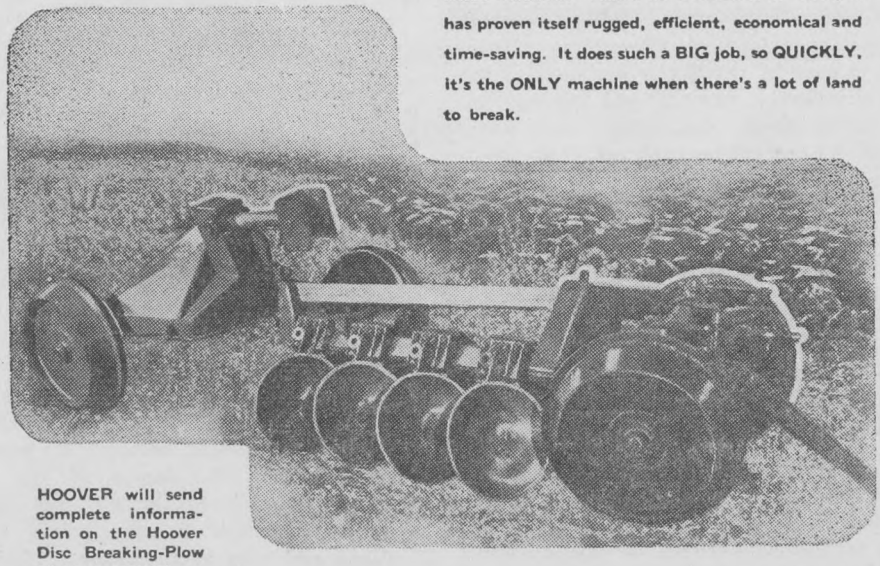

HOOVER will send complete information on the Hoover Disc Breaking-Plow at your request.

Hoover 7-Ton Disc-Breaking Plow is a Product of the Hoover Machine Co. Ltd., Hoover Factory, Edmonton, Alberta

Trans Canada Highway Yellowhead Route

"The Saga of Re-Opening" is the title of a booklet recently published by the Trans Canada Highway System Association (Yellowhead Route). Apart from the story it tells and the pictures it shows, it is worthy of a place in every home in Canada for it shows, in picture and prose, the opening up of a new stretch of scenic and industrial Canada for Canadians to be proud of.

The first essential in the progress of Canada is for every citizen to know his Canada—yet how often is it not a fact that half of Canada does not know how the other half lives. Often too they have only hazy ideas of what Canada has in scenic beauty, treasure and resources in the far flung areas of the great western lands. This booklet gives a real picture from Winnipeg to the Pacific seas, over the most travelled pioneer route in Canada. This route should have been the Canadian Pacific Railway route to the Pacific through the Rockies. Perhaps this might have been the result of too little knowledge of the then Canadian west.

It was not so many years ago when a pioneer trip, similar to the one pictured in the booklet was made from Edmonton to Jasper Park. That trip was made over bumpy ties on old railway grades, through muskeg and swamp, over little more than bear trails with a motor car. At the time there was no highway between Edmonton and Jasper. Toway there is a good highway between those points. How was it obtained, simply by the fact that Edmonton people and the people along the proposed Yellowhead route got together, planned—yelled—publicized and what is more important spent a few good dollars to put the slogan over. That slogan was "Bridge the Gap" to Jasper. Today the slogan is "Bridge the Yellowhead Gap to Vancouver." Can it be done? Well—ask yourself? You know and I know that given a good possible foundation for any movement, intense effort on the part of all will put it over.

The West needs the Yellowhead Transcontinental Highway, so does the rest of Canada. The only reason it has not yet got it is because governments often lay plans for highways and other improvements on the saying "Them as don't ask, don't want." Keep asking for a Yellowhead Trans Canada Highway and above all do not leave it all to "George" to do the asking.

RAILS FOR THE NORTH

With the completion of the Grimshaw-Slave Lake highway and its extension to Mills lake at the western end of Great Slave lake, the next step in the proper development of the North is a railway. It may be contended that there is not enough traffic in sight under present conditions to even contemplate rail connection. Outborne traffic from the North would speedily assume real proportions once a railway was in use, for numerous base metal deposits could be worked at a profit. In addition the fishing industry on Great Slave Lake is in its infancy. Lower transportation rates which a railway would bring into being would enable many low grade gold mining deposits to be also worked. And, last but not least, in view of world conditions, a railway to Great Slave Lake is almost imperative, if not to the Arctic Coast itself. In time to come, there will no doubt be a railway from Fort Churchill to Great Slave Lake; one from Grimshaw to the same point and perhaps a continuation along the lake and down the Mackenzie to the Arctic.

BARLOW MEDAL AWARD

Neil Campbell has been awarded the Barlow Memorial Medal for the best paper on a geological subject submitted to the Institute during the year 1947. His paper, entitled "The West Bay Fault, Yellowknife", propounded the theory that faulted ore from Giant Yellowknife would be found at a moderate depth in the adjoining Con and Negus mines—a theory that since has been converted into fact. Mr. Campbell is a westerner, who went east for only a brief period to acquire some more university degrees in mining and geology. He is in the employ of Consolidated Mining and Smelting Company, whose two operating gold mines in Yellowknife his geological researches seem destined to benefit in a substantial way.

She: It's easy to write a play. First act—boys meets girl. Second act they hold hands. Third act, they kiss.

He: That's how I got arrested.

She: What do you mean?

He: I wrote a five act play . . .

"OLIVER TWIST" ASKS FOR MORE

Dr. Keenleyside, Deputy Minister of Mines, Ottawa, recently visited Yellowknife and other western points. A few years ago, the fact that such an important minister in the economy of the North was visiting the district would have been classed as a "red letter" day by northerners. However, exception is now being taken to the brief time he stayed at Yellowknife. No one can take exception to the fact that during recent years the Yellowknife and the North have been exceptionally well treated by the Department of Mines and the North West Territories Council as regards improvements. Millions of dollars have been spent in the North on various projects of value to the mining industry, especially at Yellowknife by Ottawa and why an responsible minister, who perhaps, is more cognizant of local requirements, than his critics, should be expected to spend more valuable time than he needs at that place is a matter for comment, to say the least. "Oliver Twist" well known Dickens character always passed his plate up for more. Does Yellowknife expect the same?

OIL TRANSPORT IN NORTH

Yellowknife people are quite concerned at the higher cost of fuel oil brought up river from Norman Wells to Yellowknife. It is stated that the actual transportation cost is 12c a gallon. In 1945, when the Department of Transport took over the supervision of northern water freight rates, the cost of trasportation on oil from Norman to Yellowknife was raised from $20 to $30 a ton. This is the present charge. More than 3,000,000 gallons of oil are used in the Yellowknife annually and the transportation charge on it exceeds $350,000.

The two companies operating down river to Norman are Northern Transportation Company, a Government crown company and Yellowknife Transportation Company. They have no control over rates as these are fixed by the Transport Board at Ottawa.

Oil or other cheap fuel is of the utmost importance to the mining industry in the North. Many good mining prospects are idle owing to the fact that high transportation costs do not justify mining deposits of gold ores of fair grade. The Northern Transportation Company—or rather the Eldorado Company—Government owned and operated, of which it is a subsidiary showed a combined profit in the years 1946-47 of the tidy little sum of over $900,000. Part of this no doubt was derived from the transportation company. People in the Yellowknife should not be expected to contribute more than a fair share to this profit.

The above fully illustrates the well known fact that most companies operated "by the people" of Canada become almost monopolistic, for since the retirement of the Hudson's Bay Company from the northern transportation field, the Crown company is the major transportation avenue. Why the Hudson's Bay Company withdrew from the fiield is a matter for conjecture, but, no doubt, it was due to the idea that no private company can compete with a crown owned tax-free company in such a matter as transportation.

SEVEN NEW SCHOOLS FOR THE NORTH

On a recent visit to Yellowknife, Dr. H. L. Keenleyside, commissioner for the N.W. Territories stated that seven new schools would be built in the North. In addition two administrative officials to act in a senior capacity will be located—one at Fort Smith and the other at Aklavik, with aeroplane facilities for covering each district. Local administrative government is also promised to such towns as are established through increased population. Water and sewage system at Yellowknife are to be aided for the first year of operation where maintenance loss occurs.

No system of operating a local territorial government is at present being planned. Sunday movies are to be allowed to operate at Yellowknife from October to June in each year, or eight months.

Little drops of water,
Seeping through the sand,
Makes our oil production
Drop to beat the band.

Leduc-Woodbend Oil Field

An excellent map of the Leduc-Woodbend Oil Fields has recently been published by the Huff Investment Co. Limited, Edmonton. It gives the latest information as to the progress of exploration and drilling with location of producing wells.

The Leduc-Woodbend Oil Syndicate is amongst the various ventures interesting themselves in this new oilfield. This syndicate is promoting development of the half section of land acquired lying in the Woodbend area two miles north-west of the Consolidated Homestead location which is now drilling; Continental No. 3 is drilling 2¾ miles south-west of the property and Calmont-Leduc is rigging up 2½ miles to the south of the property. An interesting feature of the syndicate is the fact that it is not committed to drill for several years, thus it can await the most opportune time to locate its wells in the best locations. It has at least eight and possibly 16 drilling sites, states officials of the syndicate.

It is also stated that in the opinion of competent oil authorities, including that of Dr. J. O. G. Sanderson, Consulting Geologist for the Syndicate, the crest of the ridge appears to extend north-east through Calmont* Leduc 1 and the southeast corner of the syndicate's property. In commenting on this Dr. Sanderson states, "The east half of section 21 (the syndicate's property), is located near the upper side of the presently developed part of the Leduc oilfield, and it may be anticipated that it will be included within it in the near future". He adds "The writer anticipates that the acreage will be found to lie structurally higher than the Imperial Woodbend No. 1 (now producing), and of East Leduc No. 2 by possibly 100 feet. It lies directly on the trend direction of the high portion of the structural plunging nose of the older part of the Leduc Oilfield."

According to authorities, it has now been definitely established that the known prolific D-3 producers are located on a coral ridge whose directional trend is from south-west to north-east and that the crest of this ridge is on a line passing approximately through Atlantic No. 1, Imperial No. 3 and somewhat to the west of Imperial 42 and Central Leduc No. 2.

Officials of the Syndicate are Albert J. Huff as chairman with Harry O. Patriquin as secretary-treasurer, both of Edmonton. The Syndicate is capitalized at 200 units —valued at $5,000 per unit and split up into 1-10ths and 1-20ths of a unit.

Montana oilmen forecast that exports of Montana crude oil to Alberta will soon be a thing of the past due to the increased oil production in Alberta. Since Leduc was discovered it has delivered slightly more than 550,000 bbls. on a tight flow averaging from 70 to 170 bbls. daily from each of the 42 wells. These wells have a potential open flow of from 300 to nearly 3,000 bbls. daily, but are restricted as to flow for conservation purposes.

SCHOLARSHIPS FOR NORTH

$1,200 in scholarships for advanced education for Grade XII students available for use at any Canadian University or Technical school have been established by the federal government. Three scholarships will be awarded each year to the three leading students. Value of scholarships will be $500, $400 and $300 each.

They were newly married. On a pullman en route for the honey moon. "Johnny," said the bride, "I just can't convince myself we are really married/"

This talk went on for nearly half an hour.

Finally a voice was heard from the other end of the car, "Johnny, will you convince her so that we can all get some sleep."

"Look dear, how picturesque, the Smiths are bringing in an old Yule log."

"Yule log, my eye—that's Smith."

The little boy was seated on the curb. He was crying. An old man asked him: "What are you crying for, little boy?" Between sobs the little boy said: "Because I can't do what the big boys can do." So the old man sat down and cried with him.

An Arkansas hillbilly built a house for his wife in which he fashioned windows but no doors.

"Where are the doors?" asked the nervous bride.

He drew himself up to his full height and replied: "Doors? Are you going somewhere?

Time Marches On

Time marches on. What was considered an impossibility a few years ago is today an accomplished fact. The Alaska Highway and modern trucking has made possible the moving of a complete $7,000,000 oil refinery from Whitehorse to Edmonton a distance of 1,350 miles.

Oil was discovered at Leduc in 1947. Gradually as well after well came into production the question of providing pipe lines and a refinery of sufficient capacity to handle the oil became a matter of the utmost importance.

It was decided to build that refinery at Edmonton and it had to have a capacity, at the least, of processing from 4,000 to 6,000 barrels a day, and those sort of refineries do not grow on spruce trees north of 53, nor is it, in these days of supply shortage possible to obtain thenecessary materials in a short period of time.

During the war years, when the Japs were hammering at the door of Alaska, and had command of the northern seas, the Alaska Highway was the answer. It was built in record time well located, and thousands upon thousands of tons of oil and other supplies went over it by truck or pipe line. It proved an essential link in war strategy and today it is proving a further link in industrial strategy.

WINTER ROAD ACROSS GREAT SLAVE LAKE

Announcements that the Caterpillar train carrying the much needed material for the completion of the Snare River Power plant has succeeded in reaching its destination is of interest in connection with the fact that it followed the new projected winter road on the west side of Great Slave Lake to Yellowknife. This is the route that was surveyed during the winter by N. Cinnamon on behalf of the N.W.T. administration. Efforts are being made to get an appropriation of around $20,000 to improve the route so that it will extend the Grimshaw Highway during the winter months right through to Yellowknife.

The young mother looked with pride on her triplets. "Oh yes," she said to her girl friend who was congratulating her. "We are really happy, you know, it's truly wonderful, triplets only happen once in 5,875 times."

MAPPING CANADA FOR MINES

At the end of 1947, after close of a century of Geological Survey work, it is of interest to take stock in order to see how much of Canada has been surveyed geologically and how much more work remains to be done. The total area of the Dominion, including 444,032 square miles of Arctic Islands, on which the Geological Survey has carried out comparatively little work, is 3,694,863 square miles.

Aside from the islands, exploration work has been carried out practically in all parts of the country, so that something at least is known about the geology everywhere. Concerning 80 per cent of the country the only information available is from exploratory route traverses. For the other 20 per cent, which for the most part includes the settled and more easily accessible parts, better maps have been issued. Ofthis surveyed 20 per cent more than one half, approximately 400,000 square miles, has been covered by maps on a scale of four miles to one inch or better, and the remainder by poorer or reconnaisance maps. It was estimated in 1944, by Dr. Hanson,that only 11 per cent of Canada has been adequately mapped geologically and that at the present rate of progress it will take several hundred years to complete the task.

ALASKA HIGHWAY

All restrictions as to civilian travel over the Alaska Highway have now been removed. It is stated that there is fair accommodation at various stopping points for people desiring to use the route. It is also stated that the road is in good shape for travel. However anyone contemplating a trip over the route should provide themselves with proper camping equipment and be prepared to look after themselves at times. It is a long way from Edmonton to Fairbanks, Alaska, the country traversed is still in the pioneer stage and so, "If you go—be prepared to meet the unforseen. A car stalled 30 or more miles from a service station means either camping out or walking. So think it over before you essay the trip. Also—try to make the trip in the best travel month possible.

The young lady was easily upset, but it was excusable. Her mother had been frightened by a canoe.

The Road to Yellowknife

"Outfit continues despite tractor loss" is a headline recently published. This refers to the loss of a tractor heading a cat train which recently went through the ice on Great Slave Lake whilst making the crossing over the lake from Hay River to the Snare River project.

At great expense a new highway has been completed to Great Slave Lake (Hay River). At this point, owing to the termination of the road, a crossing has to be made over the 200 miles of ice on Great Slave Lake subject to pressure ridges open cracks and weak ice. This means that supplies crossing the lake are subject to loss.

The extension of the road to Yellowknife should be a must for the future of this valuable mining district. A route has already been plotted out along the west shore of the lake at an approximate cost for completion of around $20,000. Some two millions have been expended on the highway and until the further extension is made, traffic in winter time, must be subject to the hazards involved in crossing the lake.

GRANT TO HOSPITAL

The Federal Government is making a grant of $15,000 towards the cost of operating the Red Cross Hospital at Yellowknife. Since the hospital was opened in January the number of patients have averaged 22 a day. The Canadian Red Cross blood transfusion clinic is visiting the hospital in May for the purpose of establishing a blood bank at the hospital.

SOURDOUGHS' JUBILEE

In August next the Sourdoughs of the days of '98 are holding a get-together at Dawson City to celebrate the fiftieth anniversary of the Klondike Rush.

It is to be a carnival of real interest with old timers attending from all parts of the continent.

He was trying to pick up a beautiful blonde in the lobby.

She said, "Don't bother me."

He said, Pardon me, I thought you were my mother."

She said, "I couldn't be—I'm married."

AIDING THE PROSPECTOR

The prospector is the genesis of mining. Without the prospector Canada would have no mines, for every mine was first discovered by a prospector.

The Province of Saskatchewan has recently decided to help the prospector, recognizing the fact that any mining discovery he makes is of value to the welfare of the Province.

Briefly the aid takes the following form:

A prospector applies to the government mines department for assistance. He is flown into the area he chooses at the expense of the government and is also provided with a complete outfit including tent, canoe, maps, etc., but exclusive of bedding or food. He has to deposit a $100 bond to take care of any loss of equipment or for any provisions which may be flown into him at 30 day intervals. He must provide himself with food for the first two months, taking the same in with him. He pays no charge for this service.

There is no charge for miner licenses, transfers or assessment for the first three years after staking property. A maximum of 450 acres is allowed each prospector, which may be grouped by say two men into a 900-acre block. Cash awards for new finds on the basis of 2½ per cent of the amount spent in diamond drilling and underground work during the first three years will be made. This allows for a maximum of $2.00 a foot cost of diamond drilling and 25 cents per cubic foot for underground work.

No strings are attached to future dealing with the property, the prospector can make any deal he wants to without necessity of government approval. Samples for assay will be picked up at 30 day intervals with a government geologist spending a few days on each property discovered. No cost to the prospector.

This is a very fair deal for the prospector and should do much to help new discoveries. Alberta has 10,000 square miles of good mineral formation in the north-east corner of the province. A similar arrangement would no doubt induce many prospectors to explore this field, which has been characterized by private companies as having good possibilities for mine discovery. It also includes the known Athabasca Lake field.

Poultry is up 2 cents, but pigeons continue to drop a little.

DEVON—THE NEW OIL TOWN

Devon is the result of the discovery of oil in the Leduc field. It is to be a town of 300 modern homes situated on the banks ofthe Saskatchewan River. In addition to homes it will have business houses, churches, skating rink and schools. It will also have offices for Imperial and other oil companies. In addition it will have a hospital, bus depot, fire hall, theatre, recreation building and parking areas.

Devon is to be a town open to all newcomers either for residence or business. It will be directly connected with both Leduc and Edmonton. It will have a gas heating system supplied direct from the oil wells. Health requirements will be met by a complete sewage, electric light and water system and it is also proposed to either bridge or install a ferry across the Saskatchewan river nearby.

Already some 25 homes have been erected together with single men's quarters and office buildings for Imperial. The present houses are prefabricated in Calgary workshop, assembled in sections, and hauled to Devon by truck.

An unique feature of the town is the fact that four oil wells will be drilled within its boundaries. Devon is 15 miles from Edmonton and 11 miles from Leduc.

$30,000,000 PIPELINE

It is stated that the Imperial Oil is planning to run a pipeline, estimated to cost around $30,000,000, from the Leduc oilfield and the Princess oilfield to Moose Jaw and Regina, and eventually to Winnipeg. A survey of the route the line will follow is already under way and completion is planned by the end of 1945. Official opinion suggests that Alberta oil production will be sufficient to supply the 50,000 barrel refining capacity of the prairie provinces by the end of 1949 with the possibility that Alberta may begin oil exporting to the United States not long after.

The two were breaking the bank safe. One of them sat down on the floor, took off his socks and began twirling the dial with his toes. "What's the matter, Bill, let's get on with the job."

"Oh, it will only take a minute or two longer to open the safe this way," was the reply, "and how we will fool those finger print men."

He was a preacher. His car had bee side swiped. The other fellow just sai "I have no insurance—no nothing. If yo want to, you can call me anything yo like."

The preacher was a righteous ma limited in vocabulary as to profanity, s said, "I have only this to say. I hop when you get home tonight, your mothe runs out from under the porch, bark ferociously and bites you on the leg."

You are Now Offered an Opportunity to Participate in a New Oil Well Drilling Programme in the Blackfoot Area of the Lloydminster Field

•

There were 173 wells drilled at Lloydminster last year of which nearly one-third were drilled in the Blackfoot area. Every well drilled at Blackfoot has encountered the rich Sparky oil-sand.

Capitalization

Debentures, secured by Trust Deed, $200,000.00
Common Shares—3,000,000 No Par Value.

1,000,000 of the Common Shares have been earmarked for payment of the properties and are held in escrow.

1,000,000 Shares are to be sold with the Debentures with 1,000,000 Shares to be left in the Treasury.

Units can be obtained from the Company upon the following basis:

$100 Investment Purchases—Debentures $100 —500 N.P.V.

Debentures Will Be Retired

from proceeds of production. A minimum of 50% of the net profits, as determined for the purpose of Income Taxation, will be allocated to the retirement of the debentures, and will be paid monthly to the Guardian Trust Company, Limited. Dividends will not be paid on common shares until debentures have been retired in full. No Income Tax is payable on the redemption of the debentures.

Drilling Programme

The Company expects, if casing can be obtained, to drill eight wells during 1948, the casing for the first well being now available. These wells will be drilled as offsets to present good producing wells of Superior Oils Limited. These eight drill sites can reasonably be expected to give the Company a gross income of nearly $200,000.00 per annum. The cost of drilling and fully equipping an oil well in the Lloydminster field is from twenty-two to twenty-five thousand dollars. The proceeds from the sale of the Debentures are to be utilized for the drilling of the wells. No payment in cash is being made for the properties, consisting of over one hundred drill sites.

The Company's acreage cannot be regarded as being in a proven area and any investment in units of the Company must be regarded as speculative.

The first wells to be drilled, however, will be on properties which our Engineers, Denton-Spencer Company, Limited, consider proven.

The Company is an associate company of the Lloydminster Oil Producers, Limited, who have made a success of their operations in the Lloydminster Field, and with the same management.

Commercial Oil Producers Ltd.

Head Office: 408 Tegler Building, Edmonton, Alberta **Phone 26282**

Operating in the Lloydminster Field—Incorporated under The Alberta Companies Act

OFFICERS AND DIRECTORS

President—H. W. Rogers, Druggist, Edmonton; Vice-Presidents—Harry O. Patriquin, Chartered Accountant, Edmonton; Robert Spencer, Manufacturer, Edmonton; Secretary-Treasurer—Fred I. Batcheller, Manager, Edmonton.

Directors—T. W. McBride, Undertaker, Edmonton; C. G. Purvis, K.C., Barrister, Edmonton; Geo. A. Richardson, Manager, Edmonton; T. A. Graham, Western Supplies, Edmonton; J. B. Starky, Mine Owner, Edmonton; R. V. MacCosham, MacCosham Storage & Distributing Co., Ltd., Edmonton; Dr. L. M. Rogers, Edmonton.

Solicitors—Purvis & Johnston, 844 Tegler Building, Edmonton.

Trustee—Guardian Trust Co., Ltd., 409 McLeod Building, Edmonton.

Registered Office—408 Tegler Building, Edmonton.

MAIL THIS COUPON

COMMERCIAL OIL PRODUCERS, LIMITED
408 Tegler Building, Edmonton, Alberta.

I,....., the undersigned, hereby apply for.....units, amounting to $.....(each unit consisting of 250 shares, without nominal or par value and one debenture of $50.00 face value in the above-named Company) and enclose my cheque for $.....in this connection.

NAME..... ADDRESS.....

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PULP MACHINERY
ROAD MACHINERY
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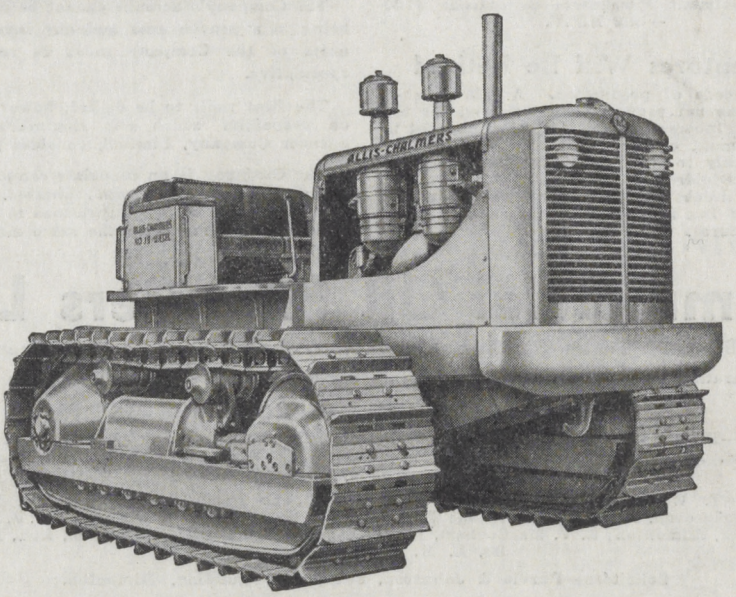

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